# UNITED STATES PATENT AND TRADEMARK OFFICE

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| EXAMINER |
|---|
| VY, HUNG T |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2163 | |

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/708,457 | BRENDEL, JUERGEN |
| | Examiner | Art Unit | |
| | Hung T. Vy | 2163 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _16-20_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-3 and 10-15_ is/are rejected.

7)☒ Claim(s) _4-9_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _04 March 2004_ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _3/4/04 & 10/05/04_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

1.      Restriction to one of the following inventions is required under 35 U.S.C. 121:

     I.      Claims 1-15 and 18-20, drawn to a virtual network attached Storage (NAS) translator, classified in class 709, subclass 203.

     II.      Claims 1-17, drawn to a method for translating requests from a client for accessing files on a plurality of servers, classified in class 209, subclass 231.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, unpatentabilities of the group I invention would not necessarily imply unpatentability of the group II invention, since the device of the group I invention could be made by other and materially different processes from those of the group II invention, in claim 16, wherein comprising the combination name with a cryptographic hash function can be used to make different device.

2.      a.      Claims 1-15, drawn to a virtual network attached Storage (NAS) translator, classified in class 709, subclass 203.

b.      Claims 18-20, drawn to a computer-program product, classified in class

709, subclass 203.

Inventions a and b are related as combination and subcombination. Inventions in

this relationship are distinct if it can be shown that (1) the combination as claimed does

not require the particulars of the subcombination as claimed for patentability, and (2)

that the subcombination has utility by itself or in other combinations (MPEP §

806.05(c)). In the instant case, the combination as claimed does not require the

particulars of the subcombination as claimed because the combination (group a) does

not require concatenation means, receiving a file name and a directory handle from the

remote client, for generating a combined name-handle as show in subcombination

(group b). The subcombination has separate utility such as portable appliance.

Because these inventions are independent or distinct for the reasons given

above and the inventions require a different field of search (see MPEP § 808.02),

restriction for examination purposes as indicated is proper.

During a telephone conversation with Stuart Aviner on 6/15/2006 a provisional

election was made without traverse to prosecute the invention of group a, claims 1-15.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 16-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b),

as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected

invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by

a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## Summary of claims

3.      Claims 1-20 are pending.

Claims 1-15 are rejected.

Claims 16-20 have been withdrawn for non-elected claims.

## Claim Rejections - 35 USC § 102

4.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

5.      Claims 1-2, and 11-13 are rejected under 35 U. S. C. § 102 (e) as being

anticipated by Alshab et al. (U.S. pub. No. 2005/0138081).

Regarding claim 1, Alshab et al. discloses a virtual Network Attached Storage

(NAS) translator comprising: a network interface that receives requests from clients, and

receives server-data from a plurality of NAS appliance servers (see paragraph 0044 or

paragraph 0088), each of the plurality of NAS appliance servers storing files and having

a file system and a Net- work connection (See fig. 7 and paragraph 0045), wherein the

server-data from the plurality of NAS appliance servers is carried over a network in

network packets wherein the requests network in network from clients are carried over

the packets (see paragraph 0095), from clients are messages using a wherein the

requests networked-file-protocol, the requests including initial requests that contain a

file name and a directory-path locator (see paragraph 0088-0089), a hash engine (see

fig. 8), receiving the file name and a directory- path locator from the network interface,

the hash engine generating a hashed-name key having a fixed-length (see paragraph

0085), a translation table with a plurality of entries that each contain a storage key, file

meta-data, and a unique identifier, the entries not storing the file name (see fig. 1 and 8-

9); wherein the meta-data includes a server identifier that in the plurality of NAS

indicates a server storing the file appliance servers (see fig. 1 and paragraph 0092), a

comparator, receiving the hashed-name key and the storage key, for selecting a

matching entry in the translation table, the matching entry having a storage key that

matches the hashed-name key (see paragraph 0149-0150 and 0154-158); and a reply

generator, receiving the unique identifier for the matching entry from the translation

table, for generating a reply to the client that is sent through the network interface to the

client, the reply containing a virtual file handle using the unique identifier (see fig. 1 and

paragraph 0126) .

With respect to claim 2, Alshab et al. discloses the file name has a variable

length (See paragraph 0148) and the hashed-name key and the store key are each

fixed-length value (see paragraph 0137) having a same fixed length (See fig. 8-9).

With respect to claim 11, Alshab et al. discloses a server network connection

(see fig. 4), a network-file layer that processes messages using the networked-file-

protocol (see paragraph 0045), a file system having a native translation table that

receives native file handles and generates physical file addresses; a disk that stores

files that are accessible by the physical file addresses (see paragraph 0088).

With respect to claims 12-13, Alshab discloses transport-control-protocol/internet

Protocol (TCP/IP) layer (see paragraph 0090), coupled to the network connection and to

the net- work-file layer, for extracting and encapsulating messages sent over the server

network connection as net- work packets (see paragraph 0093).

6.      Claims 1 and 10 are rejected under 35 U. S. C. § 102 (e) as being anticipated by

Luke et al. (U.S. patent No. 6,985,956).

Regarding claim 1, Luke et al. discloses a virtual Network Attached Storage

(NAS) translator comprising: a network interface (see column 8, line 1-15) that receives

requests from clients, and receives server-data from a plurality of NAS appliance

servers (1306-1310) (see fig. 13 or column 12, line 1-15), each of the plurality of NAS

appliance servers storing files and having a file system (1312) and a Net- work

connection (See fig. 12-13), wherein the server-data from the plurality of NAS appliance

servers is carried over a network in network packets wherein the requests network in

network from clients are carried over the packets (see column 14, line 5), from clients

are messages using a wherein the requests networked-file-protocol, the requests

including initial requests that contain a file name and a directory-path locator (see

column 18, line 42-48), a hash engine (see fig. 25), receiving the file name and a

directory- path locator from the network interface, the hash engine generating a hashed-

name key, a translation table with a plurality of entries that each contain a storage key

(see fig. 25), file meta-data, and a unique identifier, the entries not storing the file name

(see fig. 12); wherein the meta-data includes a server identifier that in the plurality of

NAS indicates a server storing the file appliance servers (see fig. 12), a comparator,

receiving the hashed-name key and the storage key, for selecting a matching entry in

the translation table, the matching entry having a storage key that matches the hashed-

name key (see column 24, line 45-68); and a reply generator, receiving the unique

identifier for the matching entry from the translation table, for generating a reply to the

client that is sent through the network interface to the client, the reply containing a

virtual file handle using the unique identifier (see fig. 33) .

With respect to claim 10, Luke et al. discloses a counter that generates the

unique identifier when a new entry is loaded into the translation table (see column 25,

line 45-55).

### Claim Rejections - 35 U.S.C. § 103

7.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

8.     Claim 3 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Alshab et

al. (U.S. pub. No. 2005/0138081).

With respect to claim 3, Alshab et al. discloses all limitations of claimed invention

recited in claim 2 except for the value of fixed length and variable length. It would have

been obvious to one having ordinary skill in the art at the time of the invention was

made to have the same value of length, since it has been held that discovering an

optimum value of a result effective variable involves only routine skill in the art. In re

Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

9.      Claims 14-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over

Alshab et al. (U.S. pub. No. 2005/0138081) in view of Burch (U.S. Patent No.

6,308,320).

With respect to claims 14-15, Alshab et al. discloses all limitations of claimed

invention recited in claim 13 except for the directory-path locator is a virtual file handle.

However, Burch discloses the directory-path locator is a virtual file handle (see column

10, line 25-45). It would have been to one of ordinary skill in art at the time the

invention was made to modify Alshab et al.'s the virtual NAS translator by providing the

directory-path locator is a virtual file handle in order to have a efficient access to update

the data transfer over network since such directory-path locator is virtual file handle has

been well known in the art as evidenced by teaching of Burch (see column 10, line 25-

45).

## Allowable Subject Matter

10.     Claims 4-9 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims, since the prior art of record and considered

pertinent to the applicant's disclosure does not teach or suggest the claimed the virtual

NAS translator wherein requests from clients also include secondary request that

contain the virtual file handle received by the client from the reply generator; further

comprising: a secondary translator, receiving the virtual file handle from the client, the

secondary translator extracting a client unique identifier from the virtual file handle and searching the translation table for a matching entry that has the unique identifier matching the client unique identifier; and a request forwarder, whereby virtual file handles from clients are replaced with native file handles by the virtual NAS translator before being forwarded to the plurality of NAS appliances servers.

## Conclusion

11.     When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm.  If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on  (571) 272-1834.  The fax numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair.  Status information for unpublished applications is available through Private Pair only.  For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on

access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll-free).

Hung T. Vy
Art Unit 2163
July 25, 2005.

TIM VO
PRIMARY EXAMINER